

SCOTT A. THOMPSON Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

KEVIN STITT Governor

April 7, 2020

Mr. Kent Fletcher, Environmental Coordinator Western Farmers Electric Cooperative P.O. Box 429 Anadarko, Oklahoma 73005-0429

Re:

Tier II Solid Waste Permit

Coal Combustion Residuals Surface Impoundment

Western Farmers Electric Cooperative Hugo Power Station

Permit No. 3512008-SI

Choctaw County

Dear Mr. Fletcher:

The Oklahoma Department of Environmental Quality (DEQ) received the above referenced Tier II Permit Application on September 21, 2018. The application was prepared by Enviro Clean Cardinal on behalf of Western Farmers Electric Cooperative (WFEC) for the Coal Combustion Residuals (CCR) Surface Impoundment (Impoundment) at the Hugo Power Station. Supplemental information and revisions were provided in response to Notices of Deficiencies issued by DEQ.

DEQ found the application to be administratively and technically complete and issued a draft permit on January 29, 2020. Public notice for the draft permit was provided in the *Hugo News* on February 14, 2020, initiating a 30-day public comment period and opportunity to request a public meeting. No comments or requests for a public meeting were received by DEQ. Accordingly, the draft permit is issued as final.

Enclosed is the final Tier II Solid Waste Permit for WFEC's CCR Surface Impoundment. Permit number 3512008-SI has been assigned to the Impoundment (CCR Units 2 and 3). Please take note of permit condition D(6), which requires submittal of a stamped copy of the recorded temporary easement to DEQ within 60 days of execution of the permit. Should you have any questions, please contact Jeff Biddick at (405) 702-5141.

Sincerely,

Hillary Young, P.E.

Chief Engineer

Land Protection Division

HY/jb

Enclosed:

Tier II Solid Waste Permit

cc:

Gerald Butcher, Western Farmers' Electric Cooperative (w/enclosure)



SCOTT A. THOMPSON Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

KEVIN STITT Governor

SOLID WASTE PERMIT

The Department of Environmental Quality hereby approves the following permit:

Permit Number:

3512008-SI

Permittee:

Western Farmers Electric Cooperative

Facility Name:

Hugo Power Station

CCR Unit Type(s):

Surface Impoundment

County:

Choctaw

Western Farmers Electric Cooperative (WFEC) owns and operates the Hugo Power Station, located on U.S. Highway 70, approximately 2.8 miles west of Fort Towson, OK. The Hugo Power Station is an electricity-generating station comprised of a single, coal-fired unit. The process results in generation of coal combustion residuals (CCR) including fly ash, bottom ash, and economizer ash. The CCR Surface Impoundment (Impoundment) formerly received bottom ash into two CCR units identified as CCR Unit 2 and CCR Unit 3. The Impoundment was also designed to collect non-CCR waste streams such as process wastewater and stormwater. The location of the Impoundment is more particularly described as follows: NE/4 of Section 28, Township 6 South, Range 19 East, Choctaw County, Oklahoma.

The Impoundment did not meet the uppermost aquifer location restriction required by OAC 252:517-5-1. Under consent order Case No. 19-090, executed October 1, 2019, WFEC must cease placing all waste streams into the Impoundment no later than October 31, 2020 and thereafter close the Impoundment in accordance with the closure plan and OAC 252:517-15-7. WFEC ceased placing CCR and non-CCR waste streams into CCR Unit 2, and initiated closure of CCR Unit 2 on August 27, 2019. This permit is for closure by complete removal of CCR in both CCR Unit 2 and CCR Unit 3. Should onsite conditions necessitate closure by leaving CCR in place and installing a final cover system in any portion of the Impoundment, revised plans will be submitted and public notice provided.

WFEC is hereby granted permission to operate and close the existing CCR Surface Impoundment at the Hugo Power Station in accordance with Consent Order Case No. 19-090 and the conditions of this permit. This permit has been prepared by the Oklahoma Department of Environmental Quality, pursuant to its authority under the Oklahoma Solid Waste Management Act, 27A O.S. § 2-10-101 et seq., and Oklahoma Administrative Code (OAC) 252 of the Oklahoma Department of Environmental Quality promulgated thereunder. No variances are being proposed as part of this permit.

This permit may be further modified, revoked and reissued, or terminated for cause as specified in 27A O.S. § 2-3-502 and OAC 252:4. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of WFEC does not stay the applicability or enforceability of any permit condition or any other law providing for protection of public health or the environment from an imminent or substantial endangerment.

SOLID WASTE PERMIT (Continued)

Issuance of this permit does not convey any property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local laws or regulations.

The provisions of this permit are severable. If any part or provision of this permit or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the decision of that court or the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

Incorporated by Reference:

- 1. Tier II Permit Application dated September 21, 2018, prepared by Enviro Clean Cardinal, LLC.
- 2. Aquifer Separation Evaluation dated October 9, 2018, prepared by Burns & McDonnell.
- 3. Response to Notice of Deficiency dated January 29, 2019, prepared and submitted via electronic mail by Enviro Clean Cardinal, LLC.
- 4. Revised Closure Plan prepared by Burns & McDonnell, submitted under cover letter dated February 19, 2019, with subsequent revisions dated November 21 and December 5, 2019, submitted in their entirety.

Western Farmers Electric Cooperative is authorized to operate and close the CCR Surface Impoundment in conformity with the permit and the application along with the other documents incorporated by reference. Commencing operations and closure under this permit constitutes acceptance of, and consent to, the conditions contained herein.

Hillary Young, P.E Chief Engineer

Land Protection Division

Date: 4-7-2020

Date: 4/7/2020

Kelly Dixon

Land Protection Division

SOLID WASTE PERMIT (Continued)

THIS PERMIT IS BASED ON DATA, DESIGN CRITERIA, PLANS, AND SPECIFICATIONS PRESENTED IN THE APPLICATION, AS REVISED AND SUPPLEMENTED, WHICH ARE HEREBY APPROVED BY DEQ AND INCORPORATED BY REFERENCE HEREIN. ANY INACCURACIES FOUND IN THE APPLICATION OR SUPPORTING DOCUMENTATION MAY PROVIDE CAUSE FOR POTENTIAL ENFORCEMENT ACTION AGAINST WESTERN FARMERS ELECTRIC COOPERATIVE AND/OR THE MODIFICATION OR REVOCATION OF THIS PERMIT.

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A. FACILITY SUMMARY

- 1. Name of Facility: Western Farmers Electric Cooperative (WFEC) Hugo Power Station
- 2. Name of Applicant, Applicant Representative and Applicant Address:

Kent Fletcher, Environmental Coordinator Western Farmers Electric Cooperative P.O. Box 429 701 NE 7th Street Anadarko, Oklahoma 73005

- 3. Legal Right to Property: Owner
- **4. Location of Site:** Approximately 2.8 miles west of Fort Towson, OK. Approximate coordinates of facility entrance: N 34°1′ 34.96"/W 95°18′ 48.65"
- 5. County: Choctaw
- 6. Number and Types of CCR Units: Existing CCR Surface Impoundment (Impoundment): Unit 2 30 acres; Unit 3 30 acres
- 7. Source(s) of CCR: On site at Hugo Power Station
- 8. Number of Acres in Permitted Boundary: 60 acres, more or less

B. <u>SITING CRITERIA AND LOCATION RESTRICTIONS</u>

- 1. Placement above the uppermost aquifer: WFEC failed to demonstrate adequate separation between the base of the Impoundment and the upper limit of the uppermost aquifer as required by OAC 252:517-5-1 and has ceased placing CCR into the Impoundment. Under Consent Order Case No. 19-090, executed October 1, 2019, WFEC must cease placing all waste streams into the Impoundment no later than October 31, 2020 and commence closure in accordance with the closure plan and OAC 252:517-15-7.
- 2. Wetlands: The Impoundment is not located in wetlands per OAC 252:517-5-2.
- 3. Fault Areas: The Impoundment is not located within 200 feet of any apparent faults exhibiting displacement in Holocene time per OAC 252:517-5-3.

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- 4. Seismic Impact Zones: The Impoundment is not located within a seismic impact zone per OAC 252:517-5-4.
- 5. Unstable Areas: WFEC has demonstrated that recognized and generally accepted good engineering practices have been incorporated into the design of the Impoundment to ensure that the integrity of the structural components of the Impoundment will not be disrupted in accordance with OAC 252:517-5-5.
- **6. 100-year Floodplain:** No waste management or disposal areas of the Impoundment are located within the 100-year floodplain as designated by the Flood Insurance Rate Maps obtained through the Federal Emergency Management Agency in accordance with OAC 252:517-5-9.

C. <u>DEFINITIONS</u>

All words or terms, when used in this permit, shall have the meaning set forth in the Oklahoma Solid Waste Management Act and Oklahoma Administrative Code 252:517-1-3, unless the context clearly indicates otherwise. Any term not defined in the Oklahoma Solid Waste Management Act and Oklahoma Administrative Code (OAC) 252:517-1-3 shall be defined as set forth in OAC 252:517-1-4.

D. GENERAL CONDITIONS

- 1. Duty to Comply: WFEC shall comply with the Oklahoma Solid Waste Management Act 27A O.S. § 2-10-101 et seq. (Act), the Environmental Quality Code (Code) and Rules promulgated thereunder, OAC 252:517, including referenced provisions of the Oklahoma Administrative Code, and all conditions of this permit. Any permit noncompliance constitutes a violation of this permit and is grounds for enforcement action, including permit modification, administrative civil penalties, summary suspension or revocation, and denial of a pending permit application.
- 2. Duty to Apply: WFEC shall apply for a permit modification when such application is required by Oklahoma Administrative Code 252:4 and 517.

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- 3. Need to Halt or Reduce Activity Not a Defense: It shall not be a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- 4. Duty to Mitigate: WFEC shall take all reasonable steps to minimize or correct any adverse impact on the environment and the public health resulting from noncompliance with this permit or site operation.
- 5. Duty to Provide Information: WFEC shall furnish to DEQ within a time specified, any information that DEQ may request to determine:
 - a. Whether cause exists for modifying, amending, suspending, or revoking this permit;
 - b. Compliance with this permit; and
 - c. Whether a new or modified permit should be issued.

WFEC shall also furnish to DEQ, upon its request, copies of records required to be kept by this permit and OAC 252:517.

- 6. Temporary Easement: The temporary easement in Attachment 4 of the Application will be completed and recorded at the county land records office upon approval of the permit. WFEC shall submit a stamped copy of the recorded easement to DEQ within 60 days of execution of this permit.
- 7. Inspection and Entry: WFEC shall allow authorized representatives of DEQ, upon the presentation of credentials as may be required by law, to:
 - a. Enter upon the permitted site or where records required by this permit are kept;
 - **b.** Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times any site construction, transportation, CCR storage, processing and management operations; and
 - d. Sample or monitor, for the purpose of assuring compliance with this permit, any substances or parameters at the facility.
- 8. Transfer of Permit: This permit may not be transferred to any other person or entity except after notice to and approval of DEQ. No transfer will be approved until WFEC complies with all transfer requirements in OAC 252:4 and 517.

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9. **Duration of Permit:** OAC 252:517-3-1 mandates the duration of this permit is for the life and, if applicable, post-closure period of the Impoundment.

E. GROUNDWATER MONITORING AND CORRECTIVE ACTION

- 1. Groundwater Monitoring: WFEC shall conduct groundwater monitoring and corrective action (if required) throughout the active life and, if applicable, post-closure care period of the CCR units in accordance with the approved groundwater monitoring program and OAC 252:517-9.
- 2. Groundwater Monitoring and Corrective Action Report: The annual groundwater monitoring and corrective action report must be submitted to DEQ for approval no later than January 31 of each year and must document, at a minimum, the information required by OAC 252:517-9-1, including groundwater contours, laboratory reports, and results of statistical analysis.
- 3. Statistically Significant Increase: Should WFEC determine that a statistically significant increase over background levels for one or more constituents listed in OAC 252:517 Appendix A, WFEC must establish an assessment monitoring program or conduct an alternate source demonstration within 90 days of the determination and submit it to DEQ for approval in accordance with the requirements of OAC 252:517-9-5 and 9-6.
- 4. Corrective Action: WFEC shall conduct corrective action if inspection of the site and/or groundwater monitoring indicates the potential for or actual release of contaminants into the environment, as detailed in OAC 252:517-9-7 through 9-9.

F. <u>DESIGN CRITERIA</u>

1. Periodic Hazard Potential Classification Assessments: The Impoundment has initially been classified as a low hazard potential surface impoundment. WFEC must prepare and submit periodic hazard potential classification assessments at a minimum frequency of once every five (5) years. If WFEC subsequently determines that the Impoundment is re-classified as either a high hazard potential or significant hazard potential CCR surface impoundment, then WFEC must prepare and submit a written Emergency Action Plan (EAP) for the impoundment per the requirements of OAC 252:517-11-4. The initial hazard potential classification assessment was completed on October 17, 2016 and approved by DEO on February 28, 2017.

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- 2. Periodic Structural Stability Assessments: WFEC must prepare and submit periodic structural stability assessments at a minimum frequency of once every five (5) years. The initial structural stability assessment was completed on October 17, 2016 and approved by DEQ on February 28, 2017.
- 3. Periodic Safety Factor Assessments: WFEC must prepare and submit periodic safety factor assessments at a minimum frequency of once every five (5) years. The initial safety factor assessment was completed on October 17, 2016 and approved by DEQ on February 28, 2017.

G. OPERATIONAL REQUIREMENTS

- 1. Air Criteria: WFEC must adopt measures that will effectively minimize CCR from becoming airborne at the facility, including CCR fugitive dust originating from CCR units, roads, and other CCR management and material handling activities.
- 2. CCR Fugitive Dust Control: WFEC must operate in accordance with the approved CCR fugitive dust control plan in addition to OAC 252:517-13-1 and any applicable standards under the Occupational Safety and Health Act. The fugitive dust control plan must be amended and submitted to DEQ for approval whenever there is a change in conditions that would substantially affect the written plan in effect.
 - Annual fugitive dust control reports must be submitted to DEQ for approval and must include a description of the actions taken by WFEC to control CCR fugitive dust, a record of all citizen complaints, and a summary of any corrective measures taken.
- 3. Inflow Design Flood Control System: WFEC must operate and maintain an inflow design flood control system to adequately manage flow into and from the Impoundment during peak discharge from the inflow design flood.
 - WFEC must amend the inflow design flood control system plan whenever there is a change in conditions that would substantially affect the written plan in effect. WFEC must prepare and submit periodic inflow design flood control system plans at a minimum frequency of once every five (5) years. The initial inflow design flood control system plan was completed on October 14, 2016 and approved by DEQ on March 6, 2017.
- 4. Inspections by a Qualified Person: The Impoundment must be inspected by a qualified person in intervals not exceeding seven (7) days, with results of the inspection documented in the facility's operating record per OAC 252:517-13-4.

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- 5. Annual Inspections by a Qualified Professional Engineer: The Impoundment must be inspected by a qualified professional engineer at least annually. The inspection shall, at a minimum, include review of available information and a visual inspection.
 - a. The annual inspection must be documented in an inspection report including the information required by OAC 252:517-13-4.
 - b. If a deficiency or release is identified during an inspection, WFEC must remedy the deficiency or release as soon as feasible and prepare documentation detailing the corrective measures taken.
 - c. DEQ shall be notified if a deficiency is identified during the inspection and provided documentation of corrective measures.

H. <u>CLOSURE, POST-CLOSURE, AND FINANCIAL ASSURANCE</u>

- 1. Updating Cost Estimates: WFEC shall submit closure and post-closure cost updates meeting the requirements of OAC 252:517-17 and Appendices E and F to DEQ for approval:
 - a. Annually, no later than April 9th of each year;
 - b. If changes occur during operation of the facility that increase the estimated closure costs; and
 - c. If any changes occur during the operation of the facility that require corrective action costs be submitted to DEQ.
- 2. Financial Assurance: Financial assurance will be for the performance cost of closure, post-closure, and/or corrective action, as applicable. WFEC shall maintain financial assurance continuously until released from the requirement to maintain such assurance by demonstrating compliance with OAC 252:517-17-3.
- 3. Notification of Closure: CCR Unit 2 initiated closure on August 27, 2019. DEQ must be notified in writing prior to beginning final closure of CCR Unit 3.
- 4. Initiation of Closure Activities: Pursuant to Consent Order Case No. 19-090, WFEC must cease placing all waste streams into CCR Unit 3 no later than October 31, 2020 and thereafter close CCR Unit 3 in accordance with the closure plan and OAC 252:517-15-7.
- 5. Closure Plan: WFEC shall close the Impoundment in accordance with the approved closure plan and OAC 252:517 Subchapter 15. The Closure Plan currently specifies closure by removal of CCR from both CCR Unit 2 and Unit 3 of the Impoundment. In accordance with OAC 252:517-15-7(c), WFEC must fully remove and decontaminate all areas affected by the

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releases from the Impoundment. CCR removal and decontamination are complete when constituent concentrations throughout the Impoundment and any areas affected by releases from the Impoundment have been removed and groundwater monitoring concentrations do not exceed the groundwater protection standard for constituents listed in Appendix B of OAC 252:517.

- 6. Closure Plan Revisions: Should conditions change such that WFEC is unable to remove all CCR from the Impoundment, WFEC must submit a Tier II permit modification for revised Closure and Post-Closure Plans, including but not limited to details for installation of a final cover system, Quality Assurance/Quality Control procedures; and a 30-year post-closure period.
- 7. Completion of Closure Activities: Each CCR unit must be closed within five (5) years of initiating closure of that unit. CCR Unit 2 initiated closure on August 27, 2019 and therefore must complete closure by August 27, 2024. WFEC may seek time extensions beyond five years with DEQ approval per OAC 252:517-15-7(f).
- 8. Post-Closure Period: Should WFEC remove all CCR and complete closure in accordance with OAC 252:517-15-7(c) and acquire DEQ approval, then WFEC is not subject to the post-closure requirements of OAC 252:517-15-9.

I. <u>RECORDKEEPING, NOTIFICATION, AND POSTING OF INFORMATION TO THE INTERNET</u>

1. Reporting Requirements: WFEC shall give notice to DEQ as soon as possible of any planned physical alterations or additions to the permitted facility and of any planned changes in the permit or activity that may result in noncompliance with permit requirements. In the event that WFEC becomes aware that it failed to submit any relevant facts or submitted incorrect information in the permit application or in any report to DEQ, it shall promptly submit correct facts or information. Failure to make a prompt submission is grounds for an enforcement action and for the modification or revocation of this permit.

All reports, notifications, or other information required by this permit to be submitted to DEQ should be sent to DEQ by verifiable delivery at the following address:

Oklahoma Department of Environmental Quality Land Protection Division P.O. Box 1677 Oklahoma City, OK 73101-1677 Solid Waste Permit
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- 2. Recordkeeping Requirements: WFEC must maintain files of all information required by OAC 252:517-19-1 in a written operating record for the facility.
- 3. Records Retention: Unless otherwise specified, each file must be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, record, or study.
- 4. Notification Requirements: The notifications required by OAC 252:517-19-2 must be sent to the DEQ before the close of business on the day the notification is required to be completed. For purposes of this Section, before the close of business means the notification must be postmarked or sent by electronic mail. If a notification deadline falls on a weekend or federal holiday, the notification deadline is automatically extended to the next business day. For those plans requiring approval by DEQ, submittal of the plan constitutes notification.
- 5. Notification Deadline: Unless otherwise required, the notifications specified by OAC 252:517-19-2 must be sent to DEQ within 30 days of placing in the operating record.
- 6. Publicly Accessible Internet Site Requirements: WFEC must maintain a publicly accessible Internet site containing the information specified by OAC 252:517-19-3.
- 7. Website Records Retention: Unless otherwise required, the information required to be posted to the CCR website must be made available to the public for at least five (5) years following the date on which the information was first posted to the CCR website.
- **8.** Posting Deadline: Unless otherwise required, the information must be posted to the CCR website within 30 days of placing into the operating record.